

IAP10 Rec'd PCT/PTO 01 DEC 2005

PTO/SB/21 (09-04)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**TRANSMITTAL
FORM**

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

5+refs.

Application Number

10/544,163

Filing Date

July 29, 2005

First Named Inventor

Hector F. DeLuca

Art Unit

Examiner Name

Attorney Docket Number

1256-01083

ENCLOSURES

(Check all that apply)

- ☐ Fee Transmittal Form
- ☐ Fee Attached
- ☐ Amendment/Reply
- ☐ After Final
- ☐ Affidavits/declaration(s)
- ☐ Extension of Time Request
- ☐ Express Abandonment Request
- ☒ Information Disclosure Statement
- ☐ Certified Copy of Priority Document(s)
- ☐ Reply to Missing Parts/
Incomplete Application
- ☐ Reply to Missing Parts
under 37 CFR 1.52 or 1.53

- ☐ Drawing(s)
- ☐ Licensing-related Papers
- ☐ Petition
- ☐ Petition to Convert to a
Provisional Application
- ☐ Power of Attorney, Revocation
Change of Correspondence Address
- ☐ Terminal Disclaimer
- ☐ Request for Refund
- ☐ CD, Number of CD(s) _____
- ☐ Landscape Table on CD

- ☐ After Allowance Communication to TC
- ☐ Appeal Communication to Board
of Appeals and Interferences
- ☐ Appeal Communication to TC
(Appeal Notice, Brief, Reply Brief)
- ☐ Proprietary Information
- ☐ Status Letter
- ☒ Other Enclosure(s) (please identify
below):

Return Receipt Postcard

Remarks

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	Andrus, Sceales, Starke & Sawall, LLP		
Signature	<i>Thomas M. Wozny</i>		
Printed name	Thomas M. Wozny		
Date	December 1, 2005	Reg. No.	28,922

CERTIFICATE OF EXPRESS MAIL

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as express mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below: The EXPRESS MAIL LABEL IS EV415015930US.

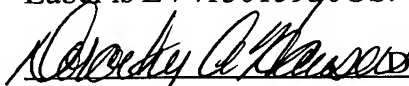
Signature	<i>Dorothy A. Hauser</i>		
Typed or printed name	Dorothy A. Hauser	Date	December 1, 2005

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appln. No. : 10/544,163	) CERTIFICATE OF EXPRESS MAILING
Applicant : Hector F. DeLuca et al	) I hereby certify that this correspondence is
	) being deposited with the United States
Filed : July 29, 2005	) Postal Service with sufficient postage as
Title : 2-Propylidene-19-Nor-	) express mail in an envelope addressed to:
Vitamin D Compounds	) Commissioner of Patents, P.O. Box 1450,
	) Alexandria, VA 22313-1450, on this 1st
TC/A.U. :	) day of December, 2005. The Express Mail
Examiner :	) Label is EV415015930US.
) 
Docket No. : 1256-01083	) December 1, 2005
	) Dorothy A. Hauser Date

INFORMATION DISCLOSURE STATEMENT
UNDER 37 CFR 1.97(b)(1)

Mail Stop: PCT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

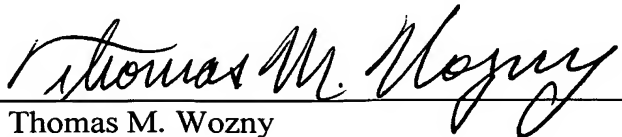
Enclosed is a PTO Form 1449 as well as copies of the references cited therein.
Patent Nos. 6,392,071, 5,936,133, 5,843,928 and publication No. US 2002/0087015 A1
were cited in a PCT International Search Report dated February 3, 2004, copy enclosed, in
a counterpart PCT patent application.

The references are being submitted in accordance with 37 CFR 1.97(b)(1).

It is respectfully submitted that all requirements have been fulfilled for
consideration of this Information Disclosure Statement, and such action is earnestly
solicited. The Examiner is invited to contact Applicant's undersigned attorney with any
questions or comments, or otherwise to facilitate prosecution.

Respectfully submitted,

ANDRUS, SCEALES, STARKE & SAWALL, LLP

By 
Thomas M. Wozny
Reg. No. 28,922

Andrus, Sceales, Starke & Sawall, LLP
100 East Wisconsin Avenue, Suite 1100
Milwaukee, WI 53202
Telephone: (414) 271-7590
Facsimile: (414) 271-5770

Form PTO-1449	U.S. Department of Commerce Patent and Trademark Office	Atty. Docket No. 1256-01083	Appln. No.: 10/544,163
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)		Applicant Hector F. DeLuca et al	
		Filing Date July 29, 2005	Group Art Unit

U.S. PATENT DOCUMENTS					
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US 2002/0087015 A1	04/28/2005	DeLuca et al	
		US 4,666,634	05/19/1987	Miyamoto et al	
		US 5,086,191	02/04/1992	DeLuca et al	
		US 5,237,110	08/17/1993	DeLuca et al	
		US 5,246,925	09/21/1993	DeLuca et al	
		US 5,428,029	06/27/1995	Doran et al	
		US 5,484,782	01/16/1996	DeLuca et al	
		US 5,536,713	06/16/1996	DeLuca et al	
		US 5,587,497	12/24/1996	DeLuca et al	
		US 5,817,648	10/06/1998	Kutner et al	
		US 5,843,927	12/01/1998	DeLuca et al	
		US 5,843,928	12/01/1998	DeLuca et al	
		US 5,877,168	03/02/1999	Miyamoto et al	
		US 5,936,133	08/10/1999	DeLuca et al	
		US 5,945,410	08/31/1999	DeLuca et al	
		US 6,392,071	05/21/2002	DeLuca et al	

FOREIGN PATENT DOCUMENTS						
		DOCUMENT NUMBER	DATE	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		EP 0078704	04-29-1987	Hesse		
		EP 0184206	12-04-1985	Miyamoto et al		
		EP 0387077	09-03-1990	DeLuca et al		
		EP 0474517	11-03-1992	DeLuca		

Form PTO-1449	U.S. Department of Commerce Patent and Trademark Office	Atty. Docket No. 1256-01083	Appln. No.: 10/544,163
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)		Applicant Hector F. DeLuca et al	
		Filing Date July 29, 2005	Group Art Unit

		EP 0480572	04-15-1992	DeLuca		
		EP 0516410	12-02-1992	DeLuca et al		
		WO 90/09991	09-07-1990	Calverley et al		
		WO 96/01811	01-25-1996	Posner		
		WO 98/41500	09-24-1998	DeLuca		

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)						
		Baggiolini et al, "Stereochemical Total Synthesis of 1 α ,25-Dihydroxycholecalciferol and 1 β ,25-Dihydroxyerocalciferol", Journal of Organic Chemistry, 51, pp. 3098-3108, 1986.				
		Bouillon et al, "Biological Activity of Dihydroxylated 19-Nor-(Pre)Vitamin D ₃ ", Bioactivity of 19-Nor-Pre D, Vol. 8, No. 8, pp. 1009-1015, 1993.				
		Chemical Abstracts, "Chemistry of Synthetic High Polymers", Vol. 110, No. 10, Abstract 110: 82505v, March 6, 1989.				
		Chemical Abstracts, XP-002066055, Vol. 121, No. 21, November 21, 1994.				
		Fujishima et al, "Synthesis and Biological Activity of 2-Methyl-20-EPI Analogues of 1 α ,25-Dihydroxyvitamin D ₃ ," Bioorganic & Medicinal Chemistry Letters, 8, pp. 2145-2148, 1998.				
		Kiegiel et al, "Chemical Conversion of Vitamin D ₃ to its 1,25-Dihydroxy Metabolite", Tetrahedron Letters, Vol. 31, No. 43, pp. 6057-60660, 1991.				
		Konno et al, "A Novel and Practical Route to A-Ring Enyne Synthon for 1 α ,25-Dihydroxyvitamin D ₃ Analogs: Synthesis of A-ring Diastereomers of 1 α ,25-Dihydroxy-Vitamin D ₃ and 2-Methyl-1,25-Dihydroxyvitamin D ₃ ," Bioorganic & Medicinal Chemistry Letters, 8, pp. 151-156, 1998.				
		Okano et al, "Regulatory Activities of 2 β -(3-Hydroxypropoxy)-1 α ,25-Dihydroxyvitamin D ₃ . A Novel Synthetic Vitamin D ₃ Derivative on Calcium Metabolism", Biochemical and Biophysical Research Communications, Vol. 163, No. 3, pp. 1444-1449, September 29, 1989.				
		Perlman et al, "1 α ,25-Dihydroxy-19-Nor-Vitamin D ₃ . A Novel Vitamin D-Related Compound with Potential Therapeutic Activity", Tetrahedron Letters, Vol. 31, No. 13, pp. 1823-1824, February 1990.				

Form PTO-1449	U.S. Department of Commerce Patent and Trademark Office	Atty. Docket No. 1256-01083	Appln. No.: 10/544,163
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)		Applicant Hector F. DeLuca et al	
		Filing Date July 29, 2005	Group Art Unit

		Posner et al, "2-Fluoroalkyl A-Ring Analogs of 1,25-Dihydroxyvitamin D ₃ -Stereocontrolled Total Synthesis via Intramolecular and Intermolecular Diels-Alder Cycloadditions. Preliminary Biological Testing", Journal of Organic Chemistry, 60, pp. 4617-4628, 1995.
		Posner et al, "Stereocontrolled Synthesis of a Trihydroxylated A Ring as an Immediate Precursor to 1 α ,2 α ,25-Trihydroxyvitamin D ₃ ", Journal of Organic Chemistry, 56, pp. 4339-4341, April 15, 1995.
		Sarandeses et al, "Synthesis of 1 α ,25-Dihydroxy-19-Norprevitamin D ₃ ", Tetrahedron Letters, pp. 5445-5448, April 1992.
		Sicinski et al, "New 1 α ,25-Dihydroxy-19-Norvitamin D ₃ Compounds of High Biological Activity: Synthesis and Biological Evaluation of 2-Hydroxymethyl, 2-Methyl, and 2-Methylene Analogues," Journal of Medical Chemistry, 41, pp. 4662-4674, 1998.
		Slatopolsky et al, "A New Analog of Calcitriol, 19-Nor-1,25-(OH) ₂ D ₂ Suppresses Parathyroid Hormone Secretion in Uremic Rats in the Absence of Hypercalcemia", American Journal of Kidney Disorders, 26(5), 832-60, 1995.
		Suhara et al, "Synthesis and Biological Evaluation of Novel 2 α -Substituted 1 α ,25-Dihydroxyvitamin D ₃ Analogues," Biolorganic & Medicinal Chemistry Letters, 10, pp. 1129-1132, March 16, 2000.

EXAMINER	DATE CONSIDERED
*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance <u>and</u> not considered. Include copy of this form with next communication to client.	